**Unit 8: Biodiversity Chart Assessment Review**

Ms. Ottolini, AP Biology, 2012-2013

**Format of the Assessment:** Your test will have five charts. The content of each is described below.

1. ***The Three Domains Chart*** (Bacteria, Archaea, and Eukarya)

* You must know whether each domain contains organisms that are unicellular, multicellular, or both
* You must know whether each domain contains organisms that are prokaryotic or eukaryotic
* You must know three key characteristics of each domain (you may choose to discuss important cell structures, organization of DNA, reproduction, or metabolism)

1. ***The Four Kingdoms of Domain Eukarya Chart*** (Protista, Fungi, Plantae, and Animalia)

* You must know whether each kingdom contains organisms that are unicellular, multicellular, or both
* You must know the metabolic strategy (autotroph, heterotroph, or either) for each kingdom
* You must be able to identify the presence or absence of a cell wall in the cells of organisms from each kingdom
* You must be able to identify each kingdom of organisms as motile or sessile (non-moving)
* You must be able to describe major body structures for each
* You must be able to describe how organisms are divided into sub-groups within each kingdom

1. ***The Four Plant Groups Chart*** (Bryophytes, Pteridophytes, Gymnosperms, and Angiosperms)

* You must be able to describe whether each group possesses the following characteristics: vascular tissue, seeds, and flowers + fruits
* You must be able to identify each group as having a dominant gametophyte or sporophyte form in its life cycle
* You must be able to identify an example organism for each group

1. ***The Nine Animal Phyla Chart*** (Porifera, Cnidaria, Platyhelminthes, Nematoda, Annelida, Mollusca, Arthropoda, Echinodermata, Chordata)

* You must be able to identify the number of germ layers found in members of each phylum
* You must be able to describe each triploblastic phylum as acoelomate, pseudocoelomate, or eucoelomate
* You must be able to describe the pattern of development in each phylum as protostome or deuterostome
* You must be able to describe the type of body symmetry found in each organism
* You must be able to identify the presence or absence of cephalization in members of each phylum
* You must be able to describe major body structures and functions characterizing each phylum
* You must be able to identify a sample organism or group of organisms in each phylum

1. ***The Five Vertebrate Classes Chart*** (Fish, Amphibians, Reptiles, Aves/Birds, Mammals)

* You must be able to identify the method of gas exchange (gills, skin, lungs) for each class
* You must be able to identify the number of heart chambers for each class
* You must be able to identify each class as ectodermic or endodermic
* You must be able to describe methods of reproduction (internal or external fertilization) and embryonic development (eggs or live birth) in each class
* You must be able to describe unique body structures and functions found in members of each class
* You must be able to identify a sample organism or group of organisms in each class